

Agent's reference: 05-430-B

**IN THE UNITED STATES RECEIVING OFFICE (RO/US)**

In re Application of:	)	
	)	
Jung Kyu SUN	)	Group Art Unit: TBA
	)	
Serial No.: 10/560,478	)	Examiner: TBA
	)	
Filed: December 12, 2005	)	
	)	
For: Method of Controlling a PAPR Using a	)	
Walsy Code Allocation Technique in a	)	
CDMA-2000 System	)	

**TRANSMITTAL LETTER**

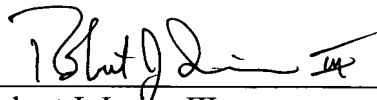
Mail Stop PCT  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450

Dear Sirs:

In regard to the above-identified application we are transmitting herewith the attached:

- 1) International Preliminary Report on Patentability;
- 2) **CERTIFICATE OF MAILING BY "EXPRESS MAIL" UNDER 37 CFR § 1.10:** The undersigned hereby certifies that this Transmittal Letter and the paper, as described hereinabove, are being deposited with the United States Postal Service with sufficient postage as "Express Mail Post Office to Addressee" in an envelope addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia, 22313-1450, on this 6<sup>th</sup> day of March, 2006, Express Mail No. **EV839411335US**.

Respectfully submitted,

By   
 Robert J. Irvine III  
 Registration No. 41,865  
 Attorney for the Applicant(s)

# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

## PCT

### NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)

(PCT Rule 44bis.1(c))

To:

YOON, Jee Hong  
Hannuri Bldg.  
219, Naeja-dong  
Chongno-gu  
Seoul 110-053  
RÉPUBLIQUE DE CORÉE

Date of mailing (day/month/year)

09 February 2006 (09.02.2006)

Applicant's or agent's file reference

FE241492

#### IMPORTANT NOTICE

International application No.

PCT/KR2004/001881

International filing date (day/month/year)

26 July 2004 (26.07.2004)

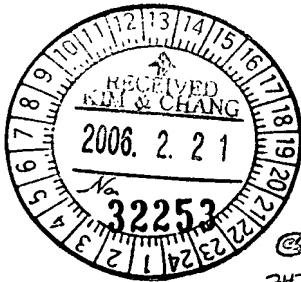
Priority date (day/month/year)

25 July 2003 (25.07.2003)

Applicant

UTSTARCOM KOREA LIMITED et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)



2H7L  
2H7R

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Philippe Becamel

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 70 90

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference FE241492	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. PCT/KR2004/001881	International filing date ( <i>day/month/year</i> ) 26 July 2004 (26.07.2004)	Priority date ( <i>day/month/year</i> ) 25 July 2003 (25.07.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant UTSTARCOM KOREA LIMITED			

<p>1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																
<p>3. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/> Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/> Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/> Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/> Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/> Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/> Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/> Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/> Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table> <p>4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</p>	<input checked="" type="checkbox"/> Box No. I	Basis of the report	<input type="checkbox"/> Box No. II	Priority	<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/> Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/> Box No. VI	Certain documents cited	<input type="checkbox"/> Box No. VII	Certain defects in the international application	<input type="checkbox"/> Box No. VIII	Certain observations on the international application
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<input type="checkbox"/> Box No. VIII	Certain observations on the international application															

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 740 14 35</p>	Date of issuance of this report 30 January 2006 (30.01.2006)
	<p>Authorized officer</p> <p>Philippe Becamel</p> <p>Telephone No. +41 22 338 70 90</p>

## COPY FOR IB

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

REC'D 05 NOV 2004

WIPO

PCT

PCT

To:

YOON, Jee Hong

Hannuri Bldg. 219 Naeja-dong, Chongno-gu, Seoul 110-053,  
Republic of Korea

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) 28 OCTOBER 2004 (28.10.2004)

Applicant's or agent's file reference  
FE241492

## FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/KR2004/001881

International filing date (day/month/year)

26 JULY 2004 (26.07.2004)

Priority date(day/month/year)

25 JULY 2003 (25.07.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC7 H04B 1/69

Applicant

UTStarcom Korea Limited et al

## 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.  
For further options, see Form PCT/ISA/220.

## 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

JEONG, Jae Woo

Telephone No. 82-42-481-5718



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001881

**Box No. I Basis of this opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001881

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1 - 3	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 3	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 3	YES
	Claims		NO

**2. Citations and explanations :**

D1 : US 5991262

D2 : US 6310869

D3 : US 6396868

The claimed inventions relate to a method of allocating Walsh codes in a CDMA2000 system, in which the lowest Walsh code among a Walsh code set is allocated to a new channel if there are out-of-use channels among the previously allocated channels.

The closest prior art D1 discloses a method of reducing peak-to-average power ratio of a composite signal, which comprises the steps of producing a peak-reducing waveform coded with one or more codes which are orthogonal to a plurality of assigned codes and summing the peak-reducing waveform to the composite signal to produce the composite signal having reduced peak-to-average power ratio.

Both of the claimed invention and D1 relate to the same subject matter of reducing peak-to-average power ratio by proper selection of the Walsh code. However, D1 does not disclose a step of allocating the lowest Walsh code among a Walsh code set to a new channel, which is a prominent feature of the claimed invention. Moreover, this step of allocating the lowest Walsh code to reduce the peak-to-average power ratio is not obvious to a person skilled in the art or is not suggested in the prior art. Consequently, the claimed inventions 1-3 are considered to fulfil both of the requirement of novelty under PCT Article 33(2) and the requirement of inventive step under PCT Article 33(3).